

# RF TRANSCEIVER MODULE FORMED IN MULTI-LAYERED CERAMIC

## Abstract

An RF transceiver module for wireless communication devices includes a multi-layered substrate, an RF transceiver IC mounted on the multi-layered substrate for receiving and transmitting voice or data signals, at least one band selection filter mounted on the multi-layered substrate for filtering received RF signals, an antenna switch integrated in the multi-layered substrate which can be switched to transmit RF signals generated by the power amplifiers to the external antenna or to receive RF signals from an external antenna to the RF transceiver IC through the band selection filter, a plurality of passive devices embedded in the multi-layered substrate, and wiring embedded in the multi-layered substrate for electrically connecting the passive devices, the RF transceiver IC, and the band selection filter.